

*Atty. Docket No. 434818*

### REMARKS

The remarks presented herein attend to all outstanding issues in the pending Office Action of 14 June 2006. Claims 1-15 are pending in the application. Claim 3 has been amended to change "electrical properties" to "electric field values" in order to provide proper antecedent basis for "said measured electric field values" in line 6. Support for this amendment may also be found, for example, in claim 4. Claim 13 has been amended to recite "said imaging gradient" having proper antecedent basis. No new matter has been added to the claims by these amendments.

The specification has been amended at p. 1 to correct a typographical error in the number of the patent issued to Rossman; at p. 4 to change "simultaneous" to "simultaneously"; at p. 5 to correct abbreviations for MHz and GHz; at p. 9 to correct the spelling of "frequencies" and "preferable"; at p. 10 to remove an extraneous "or"; at pp. 10-12 to correct the spelling of "environment", "magnetic" and "support", to insert "a" into the phrase "a plurality of monopole antenna elements", and to remove an extraneous "that"; at p. 15 to correct the spelling of "mechanical" and "elastic"; at p. 17 to remove an extraneous "that"; and at pp. 17-18 to remove an extraneous "with". No new matter has been added to the specification by these amendments.

### RESPONSE TO RESTRICTION REQUIREMENT

The Examiner has required restriction to one of three groups of claims defined as:

- I. Claims 1-3 and 6-7, drawn to systems and methods for determining electromagnetic properties of an inhomogeneous target;
- II. Claims 4 and 5, drawn to a method for determining electrical properties of an inhomogeneous target in an MR environment; and
- III. Claims 8 and 9-14, drawn to systems and methods for encoding motion in a subject.

In response to the Examiner's restriction requirement, Applicants elect the Group III claims 8 and 9-14. Claims 8, 9-14 and 15 are readable upon systems and methods for encoding motion in a subject.

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This election is made with traverse. New claim 15 has been added as a linking claim that covers a method for determining electrical/electromagnetic properties of an inhomogeneous target in an MR environment using motion encoding.

In view of the above Remarks, Applicants have addressed all issues raised in the Office Action dated 14 June 2006. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

Authorization to charge fees associated with a one-month extension of time and one additional independent claim is submitted herewith. If any additional fee is deemed necessary in connection with this Response, please charge Deposit Account No. 12-0600.

Respectfully submitted,  
LATHROP & GAGE L.C.

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